

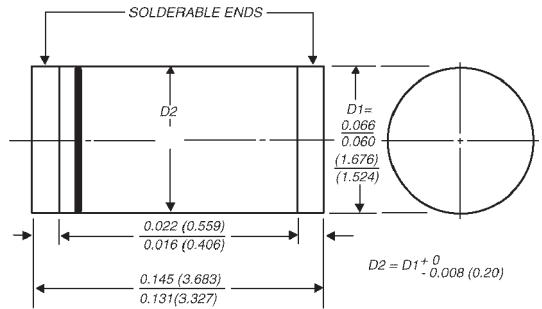
**ZMM55C-SERIES**

## Description

**DO-213AA  
(Mini-MELF)**



## Mechanical Dimensions



## Features

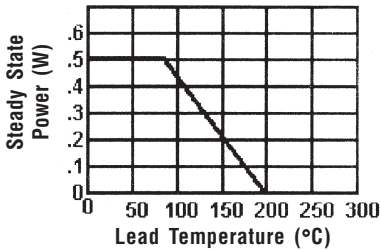
■ **1,2,5, & 20% VOLTAGE TOLERANCES AVAILABLE**

■ **WIDE VOLTAGE RANGE**  
■ **MEETS UL SPECIFICATION 94V-0**

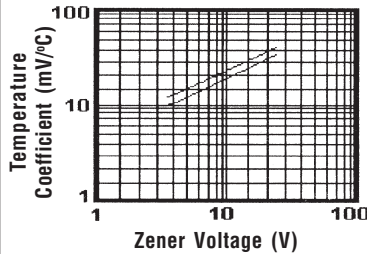
Units

Maximum Ratings	ZMM55C-SERIES	Units
DC Power Dissipation with $T_L = > = 75^\circ\text{C} \dots P_D$	500	mW
Lead Length = .375 Inches Derate Above 50 °C	4	mW / °C
Operating & Storage Temperature Range... $T_J, T_{STRG}$	-65 to 100	°C

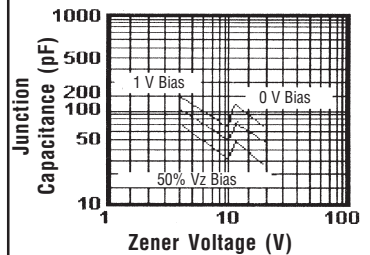
Steady State Power Derating



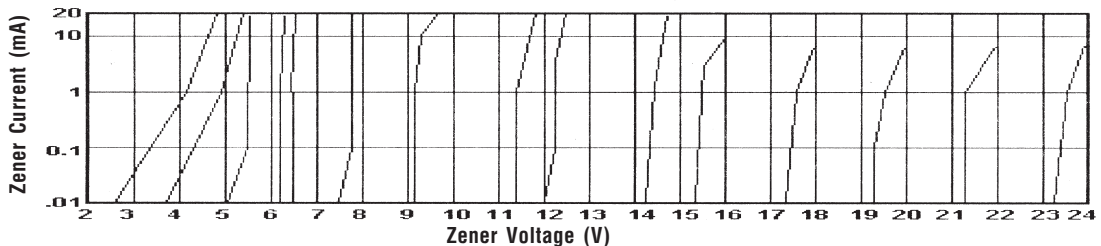
Temperature Coefficients vs. Voltage



Typical Junction Capacitance



Zener Current vs. Zener Voltage





**NOTES:** 1. For 1.0% Tolerance, Specify Suffix "A". For 2% Suffix "B", For 5% Suffix "C", and For 20% Suffix "D".  
 2.  $T_A = 25^\circ\text{C}$  unless otherwise specified. Measurements made at Thermal Equilibrium.  
 Lead Length = .375". Thermal Resistance of Heat Sink =  $30^\circ\text{C} / \text{W}$ ,  $V_F = 1.1\text{V Max.}$  @  $I_F = 200\text{mA}$

**Electrical Characteristics @ 25°C.**

Part #	Nominal Zener Voltage*	Test Current $I_{ZT}$ (mA)	Max. Zener Impedance		Max. Reverse Leakage Current @ $V_R$		Typical Temperature Coefficient %/°C	Max. Regulator Current $I_{ZM}$ (mA)
			$Z_{ZT}$ @ $I_{ZT}$ ( $\Omega$ )	$Z_{ZK}$ @ $I_{ZK} = 1\text{mA}$ ( $\Omega$ )	$I_R$ ( $\mu\text{A}$ )	$V_R$ (V)		
ZMM55-C2V4	2.28-2.56	5	85	600	50	1.0	-0.070	150
ZMM55-C2V7	2.5-2.9	5	85	600	10	1.0	-0.070	135
ZMM55-C3V0	2.8-3.2	5	85	600	4	1.0	-0.070	125
ZMM55-C3V3	3.1-3.5	5	85	600	2	1.0	-0.065	115
ZMM55-C3V6	3.4-3.8	5	85	600	2	1.0	-0.060	105
ZMM55-C3V9	3.7-4.1	5	85	600	2	1.0	-0.050	95
ZMM55-C4V3	4.0-4.6	5	75	600	1.0	1.0	-0.025	90
ZMM55-C4V7	4.4-5.0	5	60	600	0.5	1.0	-0.010	85
ZMM55-C5V1	4.8-5.4	5	35	550	0.1	1.0	+0.015	80
ZMM55-C5V6	5.2-6.0	5	25	450	0.1	1.0	+0.025	70
ZMM55-C6V2	5.8-6.6	5	10	200	0.1	2	+0.035	64
ZMM55-C6V8	6.4-7.2	5	8	150	0.1	3	+0.045	58
ZMM55-C7V5	7.0-7.9	5	7	50	0.1	5	+0.050	53
ZMM55-C8V2	7.7-8.7	5	7	50	0.1	6	+0.050	47
ZMM55-C9V1	8.5-9.6	5	10	50	0.1	7	+0.060	43
ZMM55-C10	9.4-10.6	5	15	70	0.1	7.5	+0.070	40
ZMM55-C11	10.4-11.6	5	20	70	0.1	8.5	+0.070	36
ZMM55-C12	11.4-12.7	5	20	90	0.1	9	+0.070	32
ZMM55-C13	12.4-14.1	5	26	110	0.1	10	+0.070	29
ZMM55-C15	13.8-15.6	5	30	110	0.1	11	+0.070	27
ZMM55-C16	15.3-17.1	5	40	170	0.1	12	+0.070	24
ZMM55-C18	16.8-19.1	5	50	170	0.1	14	+0.070	21
ZMM55-C20	18.8-21.2	5	55	220	0.1	15	+0.070	20
ZMM55-C22	20.8-23.3	5	55	220	0.1	17	+0.070	18
ZMM55-C24	22.8-25.6	5	80	220	0.1	18	+0.080	16
ZMM55-C27	25.1-28.9	5	80	220	0.1	20	+0.080	14
ZMM55-C30	28-32	5	80	220	0.1	22	+0.080	13
ZMM55-C33	31-35	5	80	220	0.1	24	+0.080	12
ZMM55-C36	34-38	5	80	220	0.1	27	+0.080	11
ZMM55-C39	37-41	2.5	90	500	0.1	30	+0.080	10
ZMM55-C43	40-46	2.5	90	600	0.1	33	+0.080	9.2
ZMM55-C47	44-50	2.5	110	700	0.1	36	+0.080	8.5

1. Standard Zener Diode 500mw VZ tolerance = +/- 5%
2. Measured with pulses  $t_p = 20\text{mS}$ .